

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended) A base station for assigning a radio communication channel resource by scheduling time slots to mobile stations for data communication, comprising:

transmission and reception means for conducting communication with mobile stations; and

control means for assigning a time slot preferentially to a first mobile station that is making an attempt ~~needs~~ to communicate with said base station and call an for a first application that is given a high ~~higher~~ priority over a second mobile station that needs to communicate with said base station for a second application that is given a lower priority lower than said higher priority given said first application.

2. (currently amended) The base station according to Claim 1, further comprising: a

priority distinguishing means to distinguish the priority of the object application from signal data of radio channel assignment request sent from said mobile station.

3. (currently amended) The base station according to Claim 2, further comprising: a

storage means to store mapping between a code representing an application to be offered to said mobile station over a radio communication channel, included in said signal data of radio channel assignment request, and the priority of the application.

4. (currently amended) The base station according to any one of Claims 1, 2, ~~and~~or 3, wherein said base station assigns a plurality of radio communication channels to said ~~base~~mobile station that is making an attempt to communicate with said base station and call an application that is given high priority.

5. (currently amended) The base station according to Claim 4, further comprising:

a-means to measure radio communication quality of the channel between said base station and said mobile station; ~~and,~~

wherein said a-control means to~~make~~makes said base station assign a plurality of radio communication channels to said mobile station based on the ~~basis~~ of said priority when radio communication quality less than a predetermined quality-indicating-value has been measured by said means to measure radio communication quality.

6. (currently amended) The base station according to Claim 5, wherein said comprising a

transmission/ and reception means ~~to transmits/~~receives data of same contents over said radio communication channels.

7. (currently amended) The base station according to any one of Claims 4, 5, and 6, wherein said radio communication channels are provided in time slots by time division.

8. (currently amended) The base station according to Claim 45, wherein said means to measure radio communication quality calculates a ratio of the received times slots in error to the number of received time slots for a regular period.

9. (currently amended) The base station according to Claim 3, further comprising: a
paging means for broadcasting the paging information on available applications.

10. (currently amended) The base station according to Claim 23, wherein said storage means is to retain different priority from that retained in its adjoining base station even if said priority is given to a same application that both base stations offer it over their communication channels.

Claim 11 (canceled).

12. (currently amended) ~~The mobile station according to Claim 11~~for performing data communication with a base station using at least two radio communication channels of a plurality of radio communication channels, comprising: transmission and reception means for controlling communication with said base station; and

a-control means for handling data transmission/reception over a plurality of radio communication channels in parallel including additional channels when it is notified that additional channels are assigned to it from said base station.

13. (currently amended) ~~The mobile station according to Claim 12, comprising~~wherein said a control means for selecting and handling~~selects and handles~~ data received over a channel that is regarded as being the most reliable out of the data received over a plurality of radio communication channels assigned to it.

14. (currently amended) A digital radio data communication system for multi-applications comprising:

a base station; and

a plurality of mobile stations,

wherein: the mobile stations send the base station signal data of radio channel assignment request including a code representing an application to be offered over a radio communication channel;

wherein the base station comprises:

a-means of distinguishing the priority of the application, based on the code representing the application included in said signal data of radio channel assignment request sent from the mobile stations; and

a-means of assigning one radio communication channel or a plurality of channels to the mobile stations, based on said priority, according to said signal data of radio channel assignment request sent from the mobile stations;

at least either said base station or each mobile station comprises a function of measuring the radio communication quality of the channel therebetween;

wherein the base station further comprises;

a-means to implement that if predetermined radio communication quality is not attained in a radio communication channel to be used for a higher priority application, in addition to the pre-assigned channel, ~~a new channels are~~ channel is reassigned to the mobile station using that channel so that same contents will be transmitted over a plurality of channels in parallel~~for a regular period~~.

15. (original) The digital radio communication system for multi-applications according to Claim 14, wherein said radio communication channels are provided in time slots by time division.

16. (currently amended) The digital radio communication system for multi-applications according to any one of Claims 14 and 15, wherein said function of measuring the radio communication quality determines a ratio of the received times

slots in error to the number of received time slots for a regular period as the quality indicator.

17. (currently amended) The digital radio communication system for multi-applications according to any one of Claims 14, and 15, and 16, wherein the system further comprises: a

paging means for broadcasting the paging information on available applications.

18. (currently amended) The digital radio communication system for multi-applications according to any one of Claims 14, and 15, 16, and 17, wherein a specific application service area comprises two or more contiguous cells.

19. (currently amended) ~~The~~ A digital radio communication system for multi-applications -comprising:
a base station; and
a plurality of mobile stations,
wherein the mobile stations send the base station signal data of radio channel assignment request including a code representing an application to be offered over a radio communication channel;
wherein the base station comprises:

means of distinguishing the priority of the application, based on the code representing the application included in said signal data of radio channel assignment request sent from the mobile stations, and

means of assigning one radio communication channel or a plurality of channels to the mobile stations, based on said priority, according to said signal data of radio channel assignment request sent from the mobile stations,

wherein at least either said base station or each mobile station comprises a function of measuring the radio communication quality of the channel therebetween;

wherein the base station further comprises:

means to implement that if predetermined radio communication quality is not attained in a radio communication channel to be used for a higher priority application, in addition to the pre-assigned channel, a new channels are channel is reassigned to the mobile station using that channel so that same contents will be transmitted over a plurality of channels in for a regular period according to Claim 17,

wherein the system comprises a means to implement that in a specific application service area constituted of two or more contiguous cells, different settings of the radio channel assignment priority of the application are to be assigned to the cells, according to the cell position along the direction in which mobile stations normally move.

20. (new) A base station according to claim 1, wherein said control means assigns a time slot preferentially to said first mobile over said second mobile, said second mobile is made to wait for an assignment of a time slot at a later time.

21. (new) A digital radio communication system for multi-applications comprising:

- a base station; and
- a plurality of mobile stations,

wherein the mobile stations send the base station signal data of radio channel assignment request including a code representing an application to be offered over a radio communication channel,

wherein the base station comprises:

- means of distinguishing the priority of the application, based on the code representing the application included in said signal data of radio channel assignment request sent from the mobile stations, and
- means of assigning one radio communication channel or a plurality of channels to the mobile stations, based on said priority, according to said signal data of radio channel assignment request sent from the mobile stations,

wherein at least either said base station or each mobile station comprises a function of measuring the radio communication quality of the channel therebetween;

wherein the base station further comprises:

- means to implement that if predetermined radio communication quality is not attained in a radio communication channel to be used for a higher priority application, in addition to the pre-assigned channel, a new channels are channel is reassigned to the mobile station using that channel so that same contents will be transmitted over a plurality of channels in for a regular period,

wherein said radio communication channels are provided in time slots by time division, and

wherein the system comprises means to implement that in a specific application service area constituted of two or more contiguous cells, different settings of the radio channel assignment priority of the application are to be assigned to the cells, according to the cell position along the direction in which mobile stations normally move.